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# The Massachusetts Educational Assessment Program:

# Social Studies Report

MASSACHUSETTS DEPARTMENT OF EDUCATION

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# Massachusetts Educational Assessment Program:

# Social Studies Report

MASSACHUSETTS DEPARTMENT OF EDUCATION

NOVEMBER 1988

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## SOCIAL STUDIES

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# EXECUTIVE SUMMARY

This report presents the results for social studies obtained in the 1988 Massachusetts Educational Assessment Program. Allthough the biennial testing program was initiated in 1986, this is the first assessment in the area of social studies. From 240 to 390 test items were administered to all students in grades four, eight and twelve in April 1988. The areas covered were history, government/citizenship, geography, sociocultural environment, economics, multicultural environment, social study process skills, and analysis/ evaluation of information. Because of the breadth of the test, each student took only a portion of the entire test battery and scores were aggregated at the school level.

In addition to the test items, questionnaires were given to each of the students, their teachers, and their principals. The purpose of these questionnaires was to obtain information on curriculum, instruction and other factors that can be used to interpret test results.

Chapter One gives the background of the testing program and describes the development and content of the test itself.

Chapter Two discusses student achievement in detail, using specific items to illustrate conclusions. The main findings in regard to achievement are:

**In history**, fourth grade students demonstrated a strong knowledge of specific historical facts, especially those commonly addressd in the primary level curriculum. However, they lack a strong sense of chronology and did not consistently apply their reasoning skills in dealing with historical understanding.

Eighth and twelfth grade students also appear to lack a sense of chronology and a depth of understanding in their knowledge of history. Although they showed knowledge of the pre-Civil War period, students at both levels lacked important information on post-Civil War American history and world history.

**In the area of government and citizenship,** fourth grade students performed well. They showed a good knowledge of basic concepts, an understanding of rules and rights in society, and a strong sense of democratic processes as applied in their own lives. At the upper grade levels, students displayed a general knowledge of governmental topics but lacked depth of understanding when asked to relate or explain the underlying concepts.

**In the area of geography,** results at the elementary level were mixed when compared with the emphasis placed on this area in the curriculum. Performance at the upper grades on questions pertaining to state, national and world place geography was poor. In contrast, performance in the area of human geography was generally good, particularly on items requiring students to recognize land forms, natural resources, and the agricultural and industrial use of land.

**In economics,** fourth grade students showed a familiarity with many specific economic terms and concepts and were able to apply these principles to their lives. Although some terminology was known to students, performance at the upper grades was poor on questions dealing with the characteristics of economic systems and the application of economic concepts.

**In the area of socicultural environment,** fourth grade students showed considerable knowledge and were able to deal with many multicultural issues. Eighth and twelfth grade students were strong in their understanding of elementary concepts and in their awareness of current social issues which appear to have personal relevance for them; however, they were weak in their understanding of basic social systems and lacked sociological and anthropological vocabulary and concepts.

**In the area of process skills**, fourth grade students handled the direct reading of information from maps and globes with relative ease. Results at the upper grades was poor, with little or no growth between the two grades. At all levels, students were able to answer questions that required the direct reading of graphical information, but performed poorly when asked to interpret this data. Elementary students showed familiarity with a variety of reference materials but were weaker when asked to use materials to obtain information. The upper grade students had difficulty in identifying and using a variety of reference materials. Even when growth between grades was present, neither grade level performed well in this area.

**In the area of clarifying, evaluating and using information,** the evaluative skills of fourth grade students were weaker than their analytic skills; however, many succeeded on some challenging questions requiring them to distinguish betwen fact and opinion and to identify assumptions. Eighth and twelfth grade performance on analytic questions was generally weak, as were students' skills in evaluation.

Chapter Three examines curriculum and instructional practices, as reflected in responses to the questionnaire, and relates these to performance on the test. Its basic findings are:

**Curriculum Coverage**. With the exception of place geography, no clear consensus exists in the elementary school curriculum. Teachers report giving "some emphasis" to almost all the topics covered by the assessment. On the other hand, students' responses to specific items suggest that much of their knowledge may be obtained from sources other than the instructional curriculum.

U.S. history forms the major focus of the 5-8 curriculum, with some emphasis given physical geography, process skills and critical thinking. School performance was related to the emphasis devoted to the latter two areas.

At the eighth and twelfth grade levels, the following results are reported:

**Instructional Activities.** The majority of teachers report that lecturing, textbook reading and discussion of reading material form the primary activities in social studies classes.

**Evaluation.** Quizzes and short written responses were the primary modes of evaluation at both levels.

**Instructional Resources.** The most common source of instructional material is a single textbook or material that teachers have developed themselves. The use of multiple texts and library resources were related to school performance.

**Homework.** Teachers' estimations of time requirements for homework far exceed students' responses about time spent. Approximately 60 percent of students at both grade levels report spending less than one hour per week on social studies homework. The most frequent homework assignment is reading from the textbook. Homework is related both to school and to individual student performance.

**Student Attitudes.** Although students find social studies less difficult than mathematics or science, approximately 60 percent of eighth and twelfth graders agreed that social studies consisted mainly of memorizing.

**Course Offerings.** In addition to U.S. history, world history/civilization was the most common course offering in Massachusetts high schools. Of the courses listed, the least common, offered by only half the schools, were geography and political science.

**Course Taking.** Approximately 40 percent of students are no longer taking a social studies course in the twelfth grade. By this time, 41 percent of students have taken and pased two years of social studies; another 35 percent have taken more.

**Course Taking and Achievement.** The extent of formal geography coursework was not related to achievement on the geography test items. Twelfth grade students who had taken one or more semesters of economics performed better on questions dealing with specific economics terms and concepts but similar to others in respect to more practical economics questions.

# CHAPTER 1: BACKGROUND TO THE MASSACHUSETTS EDUCATIONAL ASSESSMENT PROGRAM

The Massachusetts Educational Assessment Program (MEAP) is one of two statewide testing programs mandated by Chapter 188 of the Acts of 1985. The purpose of the assessment program is twofold: to furnish information to improve curriculum and instruction in Massachusetts schools, and to provide reliable results for comparisons at the school, district, and state levels. It does not produce scores for individual students.

Under the mandates of Chapter 188, the Massachusetts Educational Assessment Program tests all students at three grade levels in major subject areas biennially. Massachusetts students in grades 3, 7, and 11 participated in the first round of MEAP testing in April 1986; they were assessed in reading, mathematics, and science. School, district, and state results were released the following November.

The second statewide assessment was administered to students in grades 4, 8, and 12 in April of 1988; the subjects assessed were reading, mathematics, science, and social studies. The selection of grade levels, test administration times, and subjects is guided by the mandate of Chapter 188 that the performance of Massachusetts students be compared to that of their peers nationally. The change in grade levels between the first and second MEAP administrations, and the addition of social studies, were undertaken to conform to the plans of the National Assessment of Educational Progress (NAEP). NAEP identified history/ citizenship and geography as high priorities for their most recent assessment, particularly at grade 12. Test questions from the National Assessment are used as part of the MEAP tests and provide the basis for national comparisons. Other questions are developed specifically for the Massachusetts tests to assess further specific objectives or to measure Massachusetts objectives not included as part of NAEP's testing.

The goal of the assessment—to provide school and district results, rather than scores for individual students—guides test development, administration, and reporting decisions.

## Test Development

Test questions cover a broad range of student knowledge and abilities, from basic to higher order skills, in all the subjects assessed. The tests measure not what is taught in any particular grade, but everything a student could be expected to learn up to that grade level, encompassing the entire range of student ability and providing a challenge for all students.

In addition to the multiple-choice questions traditionally used in educational assessments, the 1988 MEAP tests included several open-ended (short answer) questions in each subject, designed to examine students' ability to apply knowledge and understanding in different contexts. Approximately five percent of the students completed an open-ended section of the test. Findings from this part of the program will be released during the coming school year.

**Developing Objectives in Social Studies.** The development of test objectives for social studies was guided by the broad philosophy set forth by the Board of Education in its paper titled "Goals for Education in Massachusetts." (March 1987) In that paper, the Board recommends that social studies education should:

- provide students with knowledge and understanding of how our society functions, and foster a commitment to exercise the rights and responsibilities of citizenship;
- foster tolerance and mutual respect by making students familiar with their own and each others' heritage and culture;
- provide students with knowledge and understanding of history and how historical events affect different fields of human endeavor, and with an awareness of geography and its relationship to history.

Proposed test objectives for social studies were first drafted in the spring of 1987 by the Social Studies Advisory Committee to the assessment program. A curriculum survey was sent to all schools in Massachusetts; the responses and recommendations about proposed objectives were tallied and reviewed by the committee. The final set of objectives was the result of that process.

**Developing Test Instruments.** After the objectives were set, the Social Studies Advisory Committee reviewed hundreds of test items for each grade level and selected those they believed to be most appropriate for use in the Massachusetts program. These items came from previous Massachusetts tests, from NAEP tests, and from questions developed and field tested specifically for Massachusetts students. An equity concerns committee reviewed the tests to ensure that they were fair and relevant to students from all ethnic, racial and cultural backgrounds.

In addition to the subject area tests, all students, teachers and principals at the appropriate grade levels completed questionnaires about their backgrounds, classroom practices, attitudes toward learning, and other factors that have been shown to relate to educational achievement. The advisory committee also participated in the development of questionnaire items related to social studies. Highlights from those results and their relationship to social studies achievement are included in chapter 3 of this report.

## Test Administration

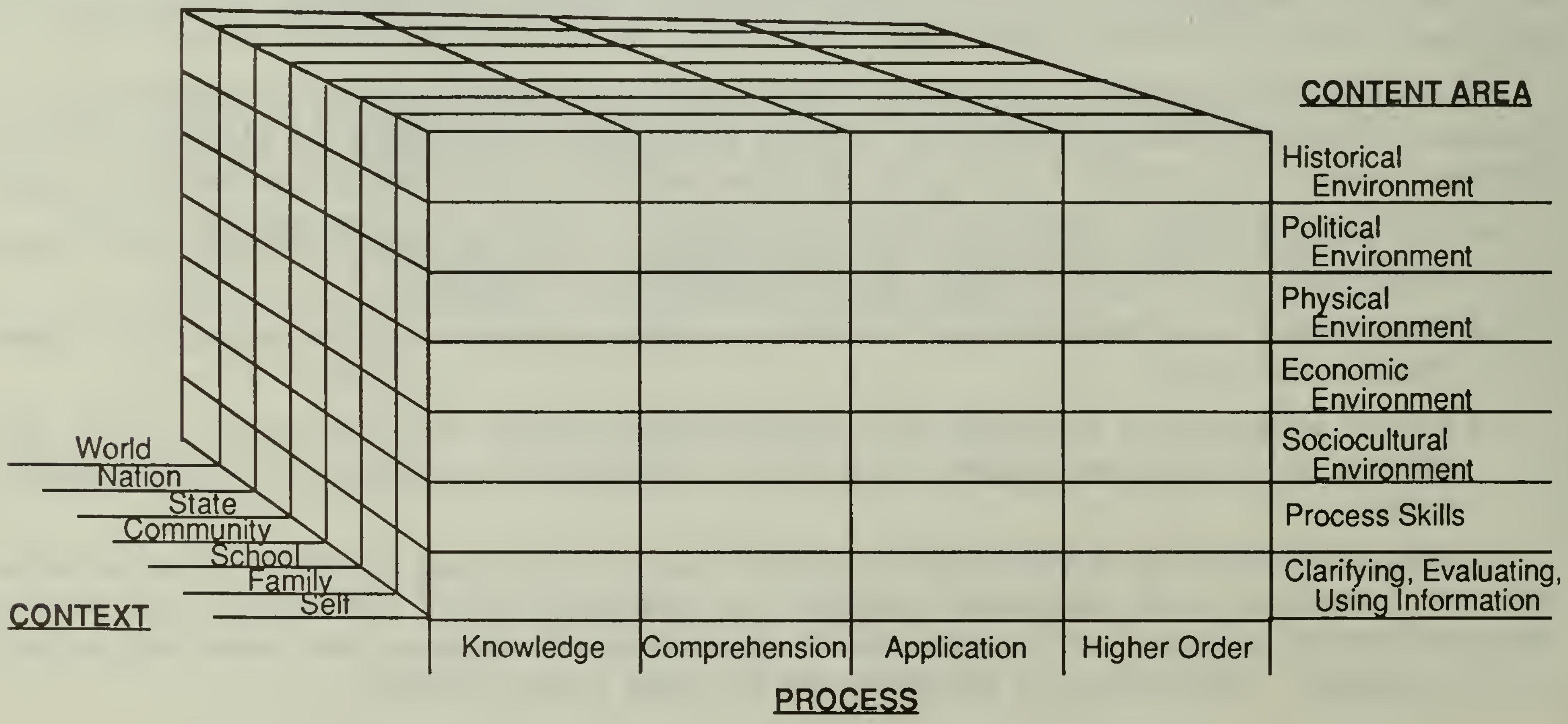
The MEAP tests are given in individual classrooms by local test administrators—classroom teachers, in most cases. Because individual student scores are not reported as part of the Massachusetts assessment, test administration is accomplished through a technique known as "matrix sampling."

The assessment tests are comprehensive, covering a broad range of objectives in each subject. If individual student scores were the goal of the program, each student would be required to complete several hundred test questions so that the scope of his or her knowledge and abilities could be validly assessed. Testing time for each student in this situation would total between twelve and twenty hours.

Because the program seeks only aggregate school and district scores, however, each student completed only a sample of test questions in each subject, reducing testing time to 90 minutes per student. The total number of test questions was divided into several forms per grade; each student completed one form. In any school or district, many students were tested using the same form, thereby producing valid and reliable test scores for the school and district as a whole. Statewide, fourth graders completed a total of 240 social studies questions, while eighth graders completed 279 and twelfth graders were assessed with 390 questions.

## Framework for Social Studies

The development and selection of test questions for the social studies component of the assessment were guided by the three-dimensional matrix below.


CONTENT AREA
Historical Environment
Political Environment
Physical Environment
Economic Environment
Sociocultural Environment
Process Skills
Clarifying, Evaluating, Using Information
World
Nation
State
Community
School
Family
Self
CONTEXT
Knowledge
Comprehension
Application
Higher Order
PROCESS

The major content categories, with the exception of **Clarifying, Evaluating, Using Information**, represent fairly traditional subdisciplines of social studies. The process categories represent types of mental or cognitive processing consistent with Bloom's Taxonomy of Cognitive Objectives described below. Social Studies achievement is reported to schools by each process and content category, as well as by many content subcategories. The categories in the context dimension (world, nation, state, etc.) are not reporting categories. This dimension was used primarily as a reminder of the various contexts for social studies questions so that questions would be developed or selected to represent these contexts whenever appropriate.

The cognitive processes represent a hierarchy of mental processes required of students in answering the test questions. **Knowledge** questions require memory processes primarily. In other words, such questions address lower level skills such as factual recall. **Comprehension** questions assess the understanding of concepts and generally require students to demonstrate understanding by translating or explaining (or in the case of multiple-choice questions, identifying appropriate translations or explanations). **Application** questions assess a slightly higher level of understanding by requiring students to apply their understanding of concepts to particular situations. Bloom's "higher order" processes include analysis, synthesis, and evaluation. **Analysis** questions require the breaking down of information into parts so that ideas and their interrelationships are made explicit. **Synthesis** questions require the "pulling together" of ideas to produce a broader message or entity. **Evaluation** questions require students to make judgments about the relative value, for some purpose, of ideas, approaches, etc. In multiple-choice questions assessing this process, several response options often have some merit, but one is clearly "best" for any particular question.

One aspect of the social studies framework still requiring elaboration is the inclusion of **Clarifying, Evaluating, and Using Information** in the content dimension. What distinguishes this category from the cognitive process categories? In short, this classification refers to "critical thinking skills" and is included in the framework in response to the increasing emphasis being placed on these skills in social studies instruction.

"Critical thinking skills" is not simply another name for "higher order thinking skills." In fact, MEAP test questions assessing critical thinking skills represent a range of Bloom's cognitive processes. To make the distinction a little more difficult, the two MEAP subcategories of **Clarifying, Evaluating, and Using Information** are **Analysis** and **Evaluation**. These are not unlike Bloom's higher order processes of "analysis" and "evaluation." However, for the purposes of the MEAP assessment, test questions in the content category of **Clarifying, Evaluating, and Using Information** focus on the critical thinking skills themselves, and success in them requires minimal knowledge or understanding of other social studies content. If a higher order question requires an understanding of content, then it is placed in the appropriate content category (historical environment, political environment, etc.) and identified as "higher order" according to the process dimension. There are many such questions in the assessment.

To minimize the content the students need to bring to the task of answering critical thinking questions, the questions themselves either provide all the information necessary, or are associated with brief "passages," such as explorers' journal entries, excerpts from speeches, or courtroom arguments. To this extent, many of the critical thinking items resemble reading comprehension items. This is consistent with the growing recognition of the importance of "reading across the curricula" — the notion that all teachers have, in some way, responsibility for teaching students how to get information from written materials. The nature of curricular materials and even the role of particular types of information (e.g., assumptions) differ across the subject areas. This is not to say that social studies instruction should, at times, focus on reading or critical thinking skills in isolation. However, in evaluating student performance, it is useful to know whether poor performance is the result of a deficiency in content or skills — e.g., whether the problem is that students are not familiar enough with the Monroe Doctrine or cannot identify assumptions.

Chapter 2 of this report discusses student performance at all grade levels in social studies. Chapter 3 examines responses to items in the student, teacher, and principal questionnaires related to social studies and links those background and attitudinal factors with achievement in Massachusetts schools. Chapter 4 briefly summarizes the findings, and describes committee recommendations.

# CHAPTER 2: HIGHLIGHTS OF RESULTS

The MEAP tested social studies by covering the content as well as the process or cognitive dimensions of the discipline, as described in the previous chapter. The areas covered by the content dimension were:

- historical environment
- physical environment
- sociocultural environment
- clarifying, evaluating, and using information.
- political environment
- economic environment
- process skills

The process dimension represents a hierarchy of mental processes required by the student to answer the test questions. These processes were categorized as knowledge, comprehension, application, and higher order thinking skills. All test items in social studies were defined by both of these dimensions. Additionally, the test covered a broad range of contexts ranging from self, family, school, and community to state, nation and world. This section of the report discusses the social studies test results for grade 4 and for grades 8 and 12 in terms of the content categories.

## History

**Grade 4.** At the elementary level, the history section of the test covered two broad categories. "Specifics of history" questions dealt with contributions of significant people and groups, important events, holidays of historical importance, topics of local and regional studies, and lifestyles of people during the American colonial and frontier periods. Questions assessing students' sense of history emphasized their sense of the past, ancestry, change, and the connections between self, family, and community; specific attention was paid to how lifestyles have changed over time and the relationship between past and present.

**Fourth graders demonstrated a strong knowledge of specific historical facts, especially those commonly addressed in the primary curriculum.**

Questions dealing with the Pilgrims and their reasons for founding a New World colony were answered correctly by at least 85 percent of the students. Students were also familiar with important figures in American history. Eighty-six percent correctly identified George Washington as the first president of the United States, and 96 percent knew that Martin Luther King, Jr. helped black Americans. Knowledge of events and persons associated with the American Revolution or any major events in American history taking place after that period was less strong. Approximately three quarters of the students knew that Americans celebrate their independence on July 4. Fifty-eight percent knew that Abraham Lincoln was president during the war that ended slavery. Similarly, information about the period preceding the Pilgrim settlement was weak. Only about one quarter of the fourth graders knew that Columbus sailed westward from Europe to find a new trade route. Sixty-eight percent knew that the Indians lived in North America before the English, the Dutch or the Vikings.

**Fourth graders lacked a strong sense of time and chronology.**

Students did not appear to be placing significant events into appropriate context and time periods. There is little evidence that they have established a frame of reference for associating ideas, people, and events. For example, the results shown below suggest that few students considered that the Pilgrims and other early travelers must have used sailing ships because other forms of transportation listed in the answer options had not been invented at that time.

| Percent of Students Grade 4 | Which of the following was the oldest form of transportation? |
|---|---|
| 26 | A. steamboat |
| 8 | B. automobile |
| 35 | *C. sailing ship |
| 31 | D. railroad train |

There is little evidence that many students made a conscious attempt to associate the listed modes of transportation with their knowledge of history and events to determine which appeared first.

**The fourth grade students did not consistently apply reasoning skills to synthesize some historical understanding.**

In a variety of instances where higher order thinking skills could have been applied to reason out answers to questions about history, students frequently failed to make those applications. The item shown above is one example: students who were unfamiliar with the specific fact being tested did not use other methods of deriving an answer. All of the transportation modes listed in the answer options required some kind of motorized engine. By finding the one option that differed from the others in its means of propulsion, students could have reasoned out the correct answer by process of elimination, even if there had been little prior knowledge of when and how the various forms of transportation had been used throughout history.

In another item, students could have called upon logical sequencing, rather than knowledge of specific dates, to determine a correct answer. A significant number of students, however, did not use this understanding.

| Percent of Students Grade 4 | Which happened first? |
|---|---|
| 9 | A. Pioneers settled the west. |
| 26 | B. The Pilgrims settled in America. |
| 59 | *C. Columbus discovered the Americas. |
| 6 | D. The United States became a nation. |

Over half of the fourth graders correctly identified the first event in the sequence; another 41 percent, however, could not. Many students may have succeeded in placing events in the appropriate sequence if they considered that settlement and organization of government took place after the discovery of a new land and that, furthermore, those activities could not have taken place before the land was discovered.

On another item, half of the students could not identify similarities and differences between modern lifestyles and lifestyles of earlier times such as the colonial period. For example, they were unclear about the concept that people in colonial times were much more self-sufficient and that modern families rely more on others for the basics of daily life.

Overall, the results revealed that there was a moderate understanding of the specifics of history appropriate for this grade level. Elementary students, however, lacked a sense of time and chronology and tended not to apply reasoning skills to pull together facts, draw conclusions, make comparisons and make simple, logical deductions.

**Grades 8 and 12.** At grades 8 and 12, the reporting categories covered U.S./American history and world history chronologically. Questions about U.S. and American history required the understanding and use of important concepts and ideas associated with various eras, periods and themes in U.S. history. Pre-1865 topics included the age of exploration, pre-Columbian America, colonialism and the American colonies, pre-war controversies and the Revolution, the formation of the new republic, westward expansion, and sectionalism and division. Post-1865 topics included the growth of industrialism, urbanization and the emergence of the U.S. as a world power. At grade 12, the post-1865 period also included the era of reform, postwar prosperity, the Great Depression, neutrality and global war, the post-war era and the Cold War, and developments at home and abroad. At both grades, the contemporary scene category covered the period after 1974 and included current events.

The world history categories included questions pertaining to prehistory and classical civilizations (e.g., early humans, ancient Greece, Rome, Egypt, China); the Middle Ages—eastern/western, 500-1600 A.D.

(e.g., early church, state, hemispheric interaction); modern world history—Renaissance to 1900 (e.g., ages of discovery, enlightenment, revolution) and twentieth century world history (e.g., growth of third world nations, international conflict/ideologies, technical revolution of the atomic and space ages).

**Students at both the intermediate and secondary levels lacked a strong sense of time and chronology.**

Student performance at the upper grade levels in history indicated that the ability to make associations across time was not strong. For example, over one third of the eighth graders had difficulty placing major historical events in sequence as demonstrated by the item below.

| Percent of Students<br>Grade 8 | Which of the following occurred first? |
|---|---|
| 17 | A. the signing of the Declaration of Independence |
| 6 | B. the ratification of the Constitution |
| 12 | C. the beginning of the Civil War |
| 65 | *D. the founding of Jamestown |

As with the elementary level, a significant number of students had difficulty in recognizing the sequence of major events in history and in ordering those events on a time line of successive actions that could not logically occur in some orders.

Other results suggest that serious misconceptions involve students' understanding of events in time. At grade 12, about half of the students knew that the American colonies rebelled against Great Britain in order to have more control over their production and trade of goods. Another 35 percent reasoned that the rebellion was spawned by the colonists' desire for religious freedom. Clearly, many students are confusing the issues of two very different time periods in North American history. The events of each period are separated by over a century representative of many important developments in American history.

**Upper grade students lacked a depth of understanding in their knowledge of history and current events.**

This was a problem even when teachers reported that these subjects were covered in their classes. While 71 percent of the intermediate-level teachers stated in the social studies questionnaires that they gave considerable emphasis to the pre-Civil War period in grades 5 through 8, many students at both grades 8 and 12 demonstrated only superficial knowledge of that period. Fewer than one third of the eighth graders knew that Lincoln's primary goal at the beginning of the Civil War was to preserve the union; 61 percent chose the incorrect answer that his goal was to free slaves. In the item shown below, which required some knowledge of the Emancipation Proclamation, both eighth and twelfth graders were largely uninformed.

| Percent of Students<br>Grade 8 | Grade 12 | The Emancipation Proclamation issued by Lincoln stated that |
|---|---|---|
| 38 | 31 | *A. slaves were free in areas of the Confederate states not held by the Union. |
| 39 | 46 | B. slavery was abolished in the Union. |
| 18 | 19 | C. the slave trade was illegal. |
| 5 | 3 | D. slaves who fled to Canada would be protected. |

The knowledge tested in this item, while very specific, reflects an important underlying issue concerning slavery in expanded territories of the U.S., one of the issues that ultimately led to the outbreak of the Civil War. Results such as these are probably most disturbing in light of the amount of time reportedly being spent on the study of this period. Many students still may not be getting exposure that leads to deeper understanding of the important cause-and-effect issues surrounding the events of the Civil War era.

In a variety of areas, students tended to recognize general facts and isolated bits of information but did not make connections among those pieces; consequently, they had difficulty seeing the larger issues. For example, students at both grade levels were able to identify the proposed "Star Wars" plan, but neither group could explain that both the U.S. and the Soviet Union practice the policy of maintaining a strong nuclear capacity in order to protect themselves from attack. In yet another period, many students had difficulty recognizing the primary effects of the industrial revolution. The question shown below illustrates the problem.

| Percent of Students<br>Grade 8 | <br>Grade 12 | | The industrial revolution in America did not result in |
|---|---|---|---|
| 11 | 6 | A. | the growth of cities. |
| 14 | 14 | B. | increased immigration because of the availability of jobs. |
| 31 | 23 | C. | the opportunity for more women to enter the workforce. |
| 43 | 56 | *D. | a lower standard of living for the nation in general. |

These results suggest that students possess superficial knowledge of information and events; they lack a deeper understanding about the underlying reasons and the ultimate impact of these events.

**Students lacked important information on post-Civil War periods.**

Post-1865 U.S. history showed mixed results. While both groups of students had general knowledge of the people and events associated with the Civil Rights movement, basic information about other periods was limited. Eighth graders had difficulty selecting the major issues following the Civil War. There was some knowledge of twentieth century history, but many twelfth graders could not identify the New Deal or define the term "Cold War."

Students exhibited gaps in their understanding of modern history as well. While they recognized specifics about the Civil Rights movement of the 1960s, they did not know that the ERA has yet to be ratified and that apartheid policies in South Africa involve racial segregation and discrimination. Current events posed some problem for both grade levels. Only about 40 percent of the eighth and twelfth graders could associate Iran with a series of news headlines about attacks on U.S. and Kuwaiti tankers in the Persian Gulf.

**In world history, students showed no apparent area of strength.**

Not all students take world history courses, however, and results for the whole population reflect this. Conversely, it is also important to note that students should have been introduced to some information, ideas, and background by grade 12 if they are to understand the history, development, and philosophical ideologies upon which our own culture is based. A basic knowledge of the classical cultures would contribute to this understanding. The item below indicates that the majority of seniors are still unfamiliar with major contributions of classical civilizations to our own culture.

| Percent of Students<br>Grade 12 | | A major contribution of Rome to western civilization was |
|---|---|---|
| 27 | A. | drama. |
| 35 | B. | the Olympic Games. |
| 36 | *C. | a legal system. |
| 3 | D. | the printing press. |

Intermediate-level teachers reported that world history in general was given limited emphasis; it may not be surprising, then, that only 39 percent of the eighth graders recognized that the Catholic Church had a significant influence upon life during the feudal era, and that there was no growth at grade 12 on the same item. Recognition of important events of other time periods in world history was similarly absent. At the secondary level, fewer than one quarter of the students could identify a significant feature of the Renaissance; only 26 percent recognized a major outcome of the Protestant Reformation.

While many social studies curricula are moving away from an emphasis on the rote memorization of facts and dates, it remains vital that students have at least a broad reference of time and place on which to build their understanding of the world and its development in terms of human events. Only half of the seniors could associate an illustration of a medieval knight on horseback with the time period from 500 to 1600 A.D.; these results are significant. A lack of factual information and further understanding of broad concepts about world events and their impact is obvious in the item shown below. Many students have only limited knowledge of the original reasons for world exploration by the Europeans.

| Percent of Students | | |
|---|---|---|
| Grade 8 | Grade 12 | The common goal of Marco Polo, Christopher Columbus, and Portuguese explorers was |
| 4 | 6 | A. a place to practice religious freedom. |
| 43 | 32 | B. settlement of the New World. |
| 51 | 59 | *C. establishment of trade routes to the Far East. |
| 2 | 9 | D. fleeing from political persecution. |

Although it is likely the information underlying the concept covered in this item was not specifically taught at either grade level involved in the assessment, most students should have encountered it in previous study of history and world exploration. Evidently, it was not learned in a manner meaningful enough to allow for transfer of the information to long-term memory.

At the upper grades, students were further hindered by lack of a working vocabulary for the social sciences. The meaning of words such as "deterrent," "interstate," and "violation" appeared to present a problem for students; it is realistic to expect, however, that students would be familiar with the vocabulary of the social sciences.

## Government and Citizenship

Student performance on items in political science indicated that they are more readily able to see applications and impact of political concepts that have personal relevance or are otherwise easily internalized. In many areas, knowledge of political structures and processes was lacking. While fourth graders appeared to have a good basis of knowledge about governmental structure, eighth and twelfth graders had difficulty recognizing characteristics of major political systems, including our own. Students at the upper two grades had a strong sense of individual rights and how they apply to specific situations, an area that can be readily internalized.

**Grade 4.** Topics covered in government at the elementary level included the role of rules, laws, and government; making, changing, and enforcing rules and laws; basic levels of local and national government; democratic principles, such as majority rule; recognition and role of historic U.S. documents; significant individuals; and songs and symbols representative of the United States. Citizenship questions focused on rights and responsibilities of group membership at various levels such as school and community. Additionally, this category included Constitutional rights and liberties and important democratic attitudes and values (e.g., willingness to cooperate and participate within a group).

> **Fourth graders' knowledge of basic concepts in government was generally good, particularly in relation to the purpose of government, electoral processes, and figures and symbols of American government.**

About 70 percent of the students recognized that an important role of government is to help people live together peacefully. Seventy-two percent knew that it is important to have more than one person run for office to insure choice in an election. Almost two thirds realized that voting is a way in which people can help government work better. Eighty-five percent could identify the national bird, while over 90 percent knew that Ronald Reagan is president and the White House is the president's official home. Although 69 percent identified Washington, D.C. as the capitol of the United States, another 25 percent of the students thought the U.S. capitol was either Boston or Massachusetts.

**Students' knowledge of reasons for rules and personal liberties was strong.**

Over 90 percent of the students identified specific reasons for rules that affect daily life, such as why students must maintain quiet in school hallways. Eighty-two percent of the younger students recognized that freedom of speech is a right of all U.S. citizens. They were less able to apply that knowledge, however, as shown below.

| Percent of Students Grade 4 | Congress passed a law. If a citizen speaks out in public against that law, that citizen | |
|---|---|---|
| 46 | A. | can be arrested. |
| 40 | *B. | is using freedom of speech. |
| 8 | C. | is not a good citizen. |
| 6 | D. | must be wrong about the law. |

**The fourth graders seemed to have a good sense of democratic processes and could apply their knowledge to hypothetical classroom situations to determine equitable ways of solving problems and achieving group consensus.**

Seventy-nine percent of the students recognized that a democratic way for a group of students to select a destination for a class trip would be to list reasons for choosing proposed destinations and take a class vote.

**Grades 8 and 12.** The government section of the tests at the upper grades covered principles, components and processes of government. The emphasis and sophistication of test questions was related to grade level.

At grade 8, questions about government required students to understand and use important concepts and ideas associated with the need for government and the origins of political principles; major historical documents as they related to U.S. and state government; forms of government, specifically democracy; separation of power and checks and balances.

At the secondary level, test items were expanded to include comparative political systems; roles and responsibilities of the levels, branches, and institutions of government; electoral, judicial and legislative processes and topics such as primary and general elections, constitutional change, the role of legislative committees, and the function of judicial bodies.

At both grades, questions concerning citizenship covered rights and responsibilities of group membership at different levels: school, town, state, and nation. Other items explored students' knowledge of such things as Constitutional rights and liberties; dissent and rights in conflict; and civil responsibilities as well as ways of participating in government.

**Students at upper grade levels had general knowledge of governmental functions but lacked depth of understanding of the subject.**

Students demonstrated only superficial knowledge of political and electoral processes. For example, 80 percent of the seniors realized that U.S. senators are elected to office, but only 64 percent know that senators are elected by citizens in their home state. Only one quarter of the eighth graders and slightly more than one third of the twelfth graders knew the basic course of a bill through Congress.

Half of those in grade 8, and 60 percent of the students in grade 12, were familiar with the concept of checks and balances and could identify ways in which this control works. They were not as skilled, however, in identifying applications of checks and balances in actual situations. The question below shows how many seniors fail to associate a recent event with this governmental control.

| Percent of Students Grade 12 | | In 1987, the Senate blocked President Reagan'sattempts to have Robert Bork appointed to the Supreme Court. This action was an application of |
|---|---|---|
| 26 | A. | the power of veto. |
| 5 | B. | minority dissent. |
| 31 | *C. | checks and balances. |
| 39 | D. | judicial review. |

Slightly fewer than half of the eighth graders and 63 percent of the twelfth graders were able to identify the correct definition of democracy. Students who chose incorrect answers were often confused by characteristics of the U.S. democratic system; these characteristics (e.g., federalism or the three branches of government) are a function of the U.S. system rather than a definition of democracy in general.

Fewer than half of the students at both levels could distinguish between the U.S. Constitution and the Declaration of Independence. While there is some growth between grades, many students are still unfamiliar with the purpose of the Constitution and continue to confuse the two documents by their senior year.

| Percent of Students | | | |
|---|---|---|---|
| Grade 8 | Grade 12 | | The purpose of writing the Constitution of the United States was to |
| 47 | 35 | A. | establish the independence of the United States. |
| 4 | 2 | B. | record the history of the republic. |
| 44 | 59 | *C. | define a system of government. |
| 5 | 5 | D. | explain the value of democracy. |

**In citizenship questions, students were able to recognize various individual rights and could identify violations of those rights.**

Ninety-four percent of the eighth graders were familiar with search and seizure laws. Over two thirds of the seniors recognized lobbying practices and individual rights pertaining to due process of law and freedom of religion. In a given hypothetical situation, approximately 80 percent of students in both grades recognized that a group has a right to publicly express unpopular opinions as long as the group does not violate the rights of others.

## Geography

**Grade 4.** Aspects of physical geography assessed at the elementary level included place geography, surface features, climate patterns, vegetation, and natural resources. Human geography included topics such as population density and clustering, cultural geography, influences of geography on various aspects of life, environmental problems, and human adaptation to, use of, and protection of the environment.

**Generally, geography questions at the elementary level produced widely mixed results.**

Ninety-one percent of the elementary-level teachers reported that physical geography is given "some" or "considerable" emphasis, and another 71 percent report that human geography receives the same degree of emphasis in their school's curriculum. The attention given to physical geography at this level is second only to map skills and reading and interpreting graphic materials. Though many students are receiving a good deal of instruction in geography, the results were mixed; general conclusions were difficult to draw. A sample of the varied results is described below.

In questions about place geography, 83 percent of the students recognized that the Mississippi River is located in the United States. Seventy-six percent realized that Massachusetts is found in the northeast region of the U.S., and 78 percent could identify Boston on an outline map of New England. Fewer than two thirds of the students knew that Florida is located in the southern part of the country; slightly more than half knew Oregon is located in the west or that Australia is in the southern hemisphere.

In human geography questions, 75 percent of the students recognized that it would be important for people living in Egypt to find ways to deal with hot and dry weather, but fewer than half knew that it would be more helpful to study the clothing of a people (rather than laws, religion or language) in order to learn about the country's climate. Eighty-seven percent recognized that early settlers often built their homes near rivers. Only 60 percent could identify farming as a common land use in the midwestern region of the United States.

These mixed results may be attributed to the absence of a common core of information about geography being taught in Massachusetts schools, making patterns of results difficult to see at the state level.

**Grades 8 and 12.** Physical geography questions required students to understand and use concepts and ideas associated with place geography, surface features, climate patterns, vegetation, water systems and natural resources. Human geography included questions about population density and clustering; cultural geography; influence of geography on politics, economics, and culture; agriculture; environmental problems; and human adaptation to, use of, and protection of the environment.

**Performance at the upper grades on questions pertaining to state, national and world place geography was poor.**

Many upper grade students were familiar with some areas of the world, but the gaps in their geographic knowledge are large. Fewer than half of the eighth graders could identify a major city or an important river on a Massachusetts state map. Twelfth graders were slightly more successful, but only 60 percent answered the questions correctly. As few as 53 percent of the students in either grade could identify a state bordering the Mississippi River, even when given an outline map of the United States. Ninety percent of the intermediate students located the Soviet Union, but fewer than 40 percent could find southeast Asia on a world map. At the secondary level, 70 percent of the students identified Central America and 84 percent recognized countries in the Middle East. Additionally, fewer than one third identified Saudi Arabia as a country bordering both the Persian Gulf and the Red Sea.

**Performance was generally good on items requiring recognition of land forms and natural resources, and on questions about agricultural and industrial land use.**

About 85 percent of the upper grade students were able to identify a plateau on a diagram of land forms. Approximately 66 percent of the students at both grades were familiar with natural resources abundant in New England.

More than two thirds of the eighth graders, and almost three quarters of the twelfth graders, could identify the kinds of problems faced by farmers in a tropical rain forest region. Similar numbers recognized an action that would be most likely to stem the formation of acid rain.

Fifty-five percent of the eighth graders and 73 percent of the seniors recognized a variety of conditions necessary for industrialization. Notably, students at both grades did not perform as well on items which required them to explain reasons for the use of steppe farming techniques or to recognize other land and soil conservation measures.

## Other Content Areas: Economics

**Grade 4.** Fundamental economic concepts covered included the basics of buying and selling, payment for products and services, production costs and profit, simple aspects of specialization and division of labor, supply and demand, needs and wants, effects of limitation of resources, the role of government (e.g., taxes and services), global economic interaction and various factors of personal economics.

**While there were mixed results on items dealing with knowledge of specific economic terms and concepts, fourth graders effectively applied reasoning skills to questions about applications of economic principles.**

Over two thirds of the elementary students demonstrated familiarity with terms such as "tax," "profit," and "import," and economic practices such as buying on credit, marketing, and striking. Fewer than half of the students were able to distinguish between wants and needs, or identify providers of products and services.

An item assessing students' understanding of the concept of supply and demand indicates that children at this grade level can apply higher order thinking skills to determine the effects of the principle.

| Percent of Students<br>Grade 4 | | Toys might cost less after Christmas because |
|---|---|---|
| 17 | A. | more people want to buy them. |
| 74 | *B. | fewer people want to buy them. |
| 5 | C. | they cost more to make in the winter. |
| 4 | D. | store owners do not have sales in the summer. |

**Grades 8 and 12.** In economics at grade 8, students were required to demonstrate understanding of the use of important concepts and ideas associated with capitalism and other economic systems, scarcity, markets, supply and demand, competition, factors influencing consumer purchasing power, the role of government in the economy, and world economic interdependence; additional attention was given to aspects of personal economics.

At grade 12, fundamental economic concepts assessed included scarcity, trade-offs, productivity, comparative economic systems, economic institutions and procedures (banks, collective bargaining), and profit motive. Other topics relating to market function included supply and demand, competition, and other factors influencing prices and consumer purchasing power. Also addressed were aspects of the national economy—gross national product, unemployment, inflation and deflation, the Federal Reserve System and money supply, and government taxing and spending policy. Important ideas from international economics included reasons for trade, barriers to trade, balance of payments and exchange rates, and the role of government in the international sector.

**Results on items requiring knowledge of economic terminology were mixed.**

Over 75 percent of the eighth graders could describe the actions involved in a strike and a boycott. Sixty-one percent recognized a definition of specialization in industry. Students exhibited difficulty with the term "tariff," as used in the following question.

| Percent of Students | | | |
|---|---|---|---|
| Grade 8 | Grade 12 | | The United States imposes tariffs on imports primarily to |
| 46 | 69 | *A. | protect American producers. |
| 12 | 11 | B. | increase foreign competition. |
| 25 | 15 | C. | expand trade with other countries. |
| 17 | 5 | D. | lower the price of imports. |

Approximately 75 percent of the students at both levels recognized a probable effect of competition between two sellers. Only 34 percent of the seniors knew what kind of information is found in the Consumer Price Index or could identify an example of an opportunity cost; 41 percent could define the term "economic scarcity."

**Performance in the upper grades was poor on questions dealing with characteristics of economic systems and applications of economic concepts.**

While it might appear encouraging that 63 percent of the eighth graders knew that the governments of the Soviet Union and China control the distribution of goods and services in their countries, slightly more than half of the students at both grades 8 and 12 believe this is the practice in the United States as well. Additionally, fewer than half of the seniors were able to identify major components of America's capitalist economy.

The item below represents the problems students exhibited in applying economic concepts and principles.

| Percent of Students | | |
|---|---|---|
| Grade 8 | Grade 12 | Suppose the United States Congress passed a law that prevented American farmers from selling wheat to the Soviet Union. Which of the following would you expect to happen as a result? |
| 9 | 5 | A. The wages of farm hands would increase. |
| 48 | 46 | B. The price of wheat would rise in the United States. |
| 33 | 45 | *C. The price of bread would decline in the United States. |
| 10 | 5 | D. The cost of farm land would rise in the United States. |

While there is some evidence of increased understanding between the two grades, students continued to confuse the cause and effect elements involved in the principle of supply and demand. Similar results were elicited by questions dealing with applications of a variety of economic concepts and principles on such things as the effects of decreased loan interest rates on consumer spending and such practices as passing on increased production costs to consumers.

## Sociocultural Environment

**Grade 4.** In this section of the assessment, fourth graders answered questions about social structure and the various elements of society, such as social institutions (family, religion, education) and social organization (the roles of groups such as community helpers and interest groups, and the relationships among groups). Also included were questions about social change (how changes take place, the causes and effects of change) and social problems.

The section addressing multicultural environments covered cultural similarities and differences (including such cultural universals as basic needs) as well as cultural transmission and interaction. Also included were questions dealing with cultural variation and interaction within and among communities and countries.

**Fourth graders did well in questions about sociocultural studies.**

Their performance is consistent with the emphasis of many elementary social studies programs on the study of family, community, institutions such as education, basic needs, and cultural universals. Almost every student could identify primary group members of a family and could recognize the social significance of the family unit. Over 80 percent recognized the role of education in society. Approximately 75 percent of the children were aware of the differing needs of communities (urban and rural), and they could identify the major roles played by an assortment of community helpers. Additionally, 90 percent knew that, given the options of food, a car, shelter, and water, the one not needed in order to live was a car.

**Students were able to deal with many multicultural issues.**

Three quarters of the fourth graders demonstrated an understanding of cultural differences and knew that people's viewpoints can differ based on their backgrounds. Most students could identify foods and customs that originated in other cultures; some specific concepts were less familiar to them. Fewer than half knew that the term "bilingual" refers to a person who is able to speak more than one language. When given a list of holidays, only 39 percent could identify the one that was not religious in origin.

**Grades 8 and 12.** At the upper grades, the sociocultural category covered aspects of social structure—the various elements of a society such as social institutions (family, religion, education) and social organizations (interest, ethnic, or religious groups), and their roles and relationships to other groups (stratification). Also included were questions about social change, including processes and causes and effects of change, and social problems, conflicts, and issues.

Across the two grades, questions in the multicultural category required students to understand and use concepts and ideas associated with cultural similarities and differences, contributions of different cultures to society, and cultural transmission and interaction. Also covered at the secondary level were aspects of psychology (e.g., motivation, perception, development) as they relate to human social behavior and to cultural differences.

**Eighth and twelfth graders exhibited strong understanding of elementary concepts and topics in sociology and an awareness of current social issues which appear to have personal relevance.**

Over three quarters of the students at both grade levels could describe how civilizations developed from hunting-and-gathering societies to modern food producers for the world market. Virtually all of the students recognized the social significance of the family. Over two thirds of the eighth graders and almost 85 percent of the high school seniors could identify a way in which rapid cultural change affects human behavior.

Some 85 percent and 94 percent of the eighth and twelfth graders respectively were able to recognize current social issues in child care; many were aware of the changing roles of men and women over the past 50 years.

**The eighth and twelfth grade results suggest that students have some superficial understanding of comparative cultures but were weak in understanding social systems requiring a global perspective.**

Between 75 and 80 percent of the students at both grades recognized that many cultures celebrate similar holidays in different ways. A comparable number were able to recognize the origins of various traditions from cultures other than our own.

Students seem to be unaware of major differences among world social systems. For example, many students assumed that all cultures equate social status with money. Forty-three percent of the twelfth graders stated that an individual's social status in a caste system is determined by income. Students' tendency to attribute characteristics of our own culture to all other cultures suggests that their understanding may be limited to a personal perspective.

**Students' formal knowledge of vocabulary and concepts in sociology and anthropology was minimal.**

Fewer than one third of the students at each grade knew how individual status is determined in a society under the caste system. Fewer than half of the seniors, and only 34 percent of the grade 8 students, knew that a nuclear family is made up of immediate family members only. At twelfth grade, students were largely unfamiliar with different types of societies (agrarian, urban, industrialized), and most could not identify an example of stratification within a group. In contrast, most students could define the terms "Hispanic" and "bilingual," perhaps because of exposure to these terms in their own environment.

## Process Skills: Map Skills

**Grade 4.** At the elementary level, traditional map skills required familiarity with maps and globes, ability to read and use maps, map legends and symbols, and understanding of scale.

> **Fourth graders were able to read information from maps and globes with relative ease.**

The only exceptions to this trend were in determining approximate distance using a bar scale and in determining combined direction (e.g., northeast). From 85 to 95 percent of the students could find the most direct route on a map and use map key symbols. Only 59 percent, however, could identify the direction between two towns on a map, while fewer than two thirds could use a simple bar scale to determine distance on a grid map.

**Grades 8 and 12.** Questions at the intermediate and secondary levels covered traditional map skills, which required familiarity with different types of maps and globes, the ability to read and use maps, map legends, and symbols, and an understanding of scale, coordinates, and direction.

> **Results in map skills at the upper grades were poor. There was little to no growth between eighth and twelfth grade performance.**

When asked to use the most basic of map skills, generally fewer than 75 percent of students at either grade performed acceptably. Most questions garnered 50 to 60 percent correct, even on such simple tasks as determining approximate distance and finding direction from one point to another. When given a picture of a globe, only half of the seniors could determine latitude and longitude coordinates; fewer than two thirds could identify the prime meridian. In that question, eighth graders did better than twelfth graders by 7 percentage points. Generally, twelfth graders' skills in this area rarely exceeded those of the middle school students—a result possibly consistent with the K-12 curriculum students experience.

## Process Skills: Graphic Representation

**Grade 4.** Elementary-level questions on graphic representation required students to read and interpret information presented graphically within a social studies context. Different types of graphs, charts, and time lines were used.

> **Students performed well on items requiring them to read information presented in graphs, tables and charts. They did very poorly when asked to perform multistep processes.**

When given a time line showing the years for different inventions of the 1800s, over 80 percent of the children could identify which product was invented first and in what year an invention was introduced. However, when asked to identify the means of communication that could have been used to announce the invention of the elevator, only about half of the students realized that the telephone, because it appears later on the time line, could not have been a logical choice.

**Grades 8 and 12.** Questions in this section of the test required students to read, interpret, and use information presented graphically within a social studies context. Different types of graphs, charts, pictures, political cartoons, and time lines were used.

> **Students at the upper grades performed poorly when asked to do more than read information presented in graphic form or to use multistep methods to read and interpret information.**

While most students were successful in reading information directly from a great variety of graphics, it was apparent that many students tended to read material quickly and select the first answer that appealed to them when faced with more demanding tasks. The item below demonstrates the problem students had with multistep questions and shows relatively little growth between grades 8 and 12.

### LOCATION OF LOW INCOME PEOPLE IN THE U.S. — 1970

| Location | Millions of People |
|---|---|
| Cities of 50,000 or more | 7.8 |
| Suburbs | 5.1 |
| Total in metropolitan areas | 12.9 |
| Farms | 2.4 |
| Rural non-farms | 10.1 |
| Total outside metropolitan areas | 12.5 |
| Total number of low income people | 25.4 |

| Percent of Students | | |
|---|---|---|
| Grade 8 | Grade 12 | Which statement is supported by the evidence in the chart? |
| 28 | 27 | A. Most low income people lived in cities of 50,000 or more people. |
| 10 | 7 | B. More than five million low income people lived on farms. |
| 19 | 11 | C. Almost one half of all low income people lived on farms. |
| 43 | 54 | *D. Almost one half of all low income people lived outside metropolitan areas. |

## Process Skills: Research Skills

**Grade 4.** The research skills category included some general reference skills and knowledge of resources, but also covered problem-solving skills and data-gathering techniques typical of social studies research.

> **The elementary students were familiar with a variety of reference materials. They had difficulty categorizing social studies information and using two-step processes to locate information.**

At least 75 percent of the students were able to identify the primary use of common reference materials such as the encyclopedia, dictionary, index, and atlas. Ninety-two percent were able to locate information in a table of contents, but when asked to determine where specific information would most likely be found, based on chapter names within a unit, the percentage of correct responses dropped by 20 points. Additionally, many children were not able to answer questions requiring multiple steps to answer. In using an index from a textbook, only 28 percent of the students could find page numbers where specific information would be found, while 67 percent stopped after the page number for a major heading. When asked to determine the best source of information, many students were not able to make the required finer distinctions. For example, given a list of book titles, fewer that two thirds could identify the book that would contain the most relevant information to the question posed. Students knew about ways in which sources could be used, however. Almost 90 percent knew that photographs and pictures can help in finding out about how people live.

**Grades 8 and 12.** The research skills category included some general reference skills and knowledge of resources, and problem-solving and data-gathering techniques typical of social studies research. At the secondary level, this category also included skills at identifying problems and developing a focus and approach to investigations common to social studies research.

> **Upper grade students had difficulty in identifying and using a variety of reference materials.**

While there was some recognition of types of reference materials, eighth and twelfth grade students had definite gaps in their repertoire. Only two thirds of the students at both grades could identify the primary purpose of a book index. Only 32 percent of the eighth graders and 57 percent of the twelfth graders could identify the purpose of the *Reader's Guide to Periodical Literature*; very few of them could demonstrate how it is used. Fewer than two thirds of the students at either grade could distinguish between primary and secondary sources. There was some growth between grades 8 and 12 in this area; the seniors were better at identifying the best source of information and determining whether a set of sources would present a balanced view of an issue. Some fundamentals in research skills appear to be lacking, however, and even when growth between grades was evident, neither grade level performed outstandingly.

## Clarifying, Evaluating and Using Information: Analysis

**Grade 4.** Analytic skills frequently included in the domain of critical thinking were addressed in questions from this part of the MEAP social studies test. These skills require students to use information provided to them by identifying: types of information (distinguishing fact and opinion, recognizing assumptions) essential ideas, relationships among expressed ideas (including cause and effect), time sequence of events, and common characteristics of two or more ideas (comparison and contrast).

**Fourth graders showed some strength in analytic skills.**

Two thirds to three fourths of the fourth graders succeeded on some challenging questions requiring them to distinguish between fact and opinion. After reading a conversation between a football coach and a reporter, over 60 percent of the students identified an assumption made by the coach and could select another person to be interviewed by the reporter to get a balanced view of the game under discussion.

**Grades 8 and 12.** Questions for these grade levels also measured students' critical thinking abilities. The skills covered at the upper grades required students to clarify information by identifying types of information (facts, value judgments, assumptions, generalizations, etc.), essential ideas, and relationships among ideas.

**Eighth and twelfth grade performance in analytic skills was generally weak.**

While high school students were more adept than middle school students in this area, their results showed weaknesses in analytic thought. Many students at both grades lacked the reasoning skills necessary to make distinctions and informed choices among answer options. In the question below, students should have read each statement and then determined whether that statement was an effective argument for change in the speed limit.

| Percent of Students | | | |
|---|---|---|---|
| **Grade 8** | **Grade 12** | | Which of the following is an argument for the federal government's allowing states to raise the maximum speed limit to 65 mph? |
| 49 | 28 | A. | Research has shown that higher speeds are associated with more frequent accidents. |
| 32 | 56 | *B. | Truckers are paid by the hour, so higher speeds reduce shipping costs and therefore help the economy. |
| 10 | 10 | C. | There is evidence that at higher speeds more fuel is wasted. |
| 4 | 8 | D. | The world's fossil fuel supply is limited. |

## Clarifying, Evaluating and Using Information: Evaluation

At all grade levels, questions measuring evaluation skills required students to make judgments: to weigh evidence and to draw and evaluate inferences based on information provided. The judgments were related to causes or outcomes of actions and events, including projected or hypothetical outcomes. The evaluation of evidence also included evaluation of sources of evidence.

**Grade 4.**

**The evaluative skills of elementary students were generally weaker than their analytic skills.**

Slightly more than half of the fourth graders identified the best clue that showed a story was set in the past; fewer than half selected the object in the story that gave the same information. Elementary students also had difficulty recognizing cause and effect, although those questions were more difficult than ones generally posed when students are introduced to the concept. The questions involved social, rather than physical, events, and some required students to infer the most likely cause or effect. A difficult question is shown below.

| Percent of Students<br>Grade 4 | A city closed down a neighborhood playground. Which of the following is the MOST LIKELY EFFECT of this? |
|---|---|
| 6 | A. The city opened up a public swimming pool. |
| 15 | B. More families moved into the neighborhood. |
| 55 | C. The city ran out of money to take care of the playground. |
| 24 | *D. More children played in streets and on the sidewalks. |

This question required students to evaluate each answer option separately to determine whether it could be a plausible result. Most students appear to have stopped evaluating possible options after they reached one that is a plausible cause of the event.

**Grades 8 and 12.**

**Evaluative skills of students in both upper grades were generally weak.**

Approximately 70 percent of the seniors were able to draw logical conclusions from, and make generalizations based on, a given series of facts. Students who had problems with these exercises tended to over-generalize from the information given. Over half of the students at this level were able to identify the strongest evidence to support a point and select the most reliable source of information in specific situations.

Given short passages (journal entries, speech excerpts, etc.), students performed poorly on questions requiring them to evaluate evidence and arguments. In an excerpt from a speech by Al Smith, former Democratic candidate for president, just over a third of the eighth graders and about half of the twelfth graders could identify the claim best supported with facts. Just over half of the students at both grade levels could identify the best support for another claim in the speech. And finally, only 32 percent and 42 percent of the eighth and twelfth graders respectively could interpret the meaning of the "[loud noises]..." that occurred during the speech. The question required that students first recognize evidence throughout the transcript that listeners were strong supporters of Smith (e.g., "[applause]" at particular points). Then they had to use that information to decide how such listeners would react to a claim defaming Smith. This question illustrates the hierarchical nature of thinking skills—evaluation questions require careful analysis before evaluation.

# CHAPTER 3: QUESTIONNAIRE RESULTS

This chapter describes the social studies curriculum in Massachusetts schools. The information used was obtained from the assessment questionnaires which were given to each student, teacher and principal who participated in the testing. Although the instructional questions asked of teachers were answered with reference to a specific class, questions regarding the coverage of topics referred to the education that students had received up to that level.

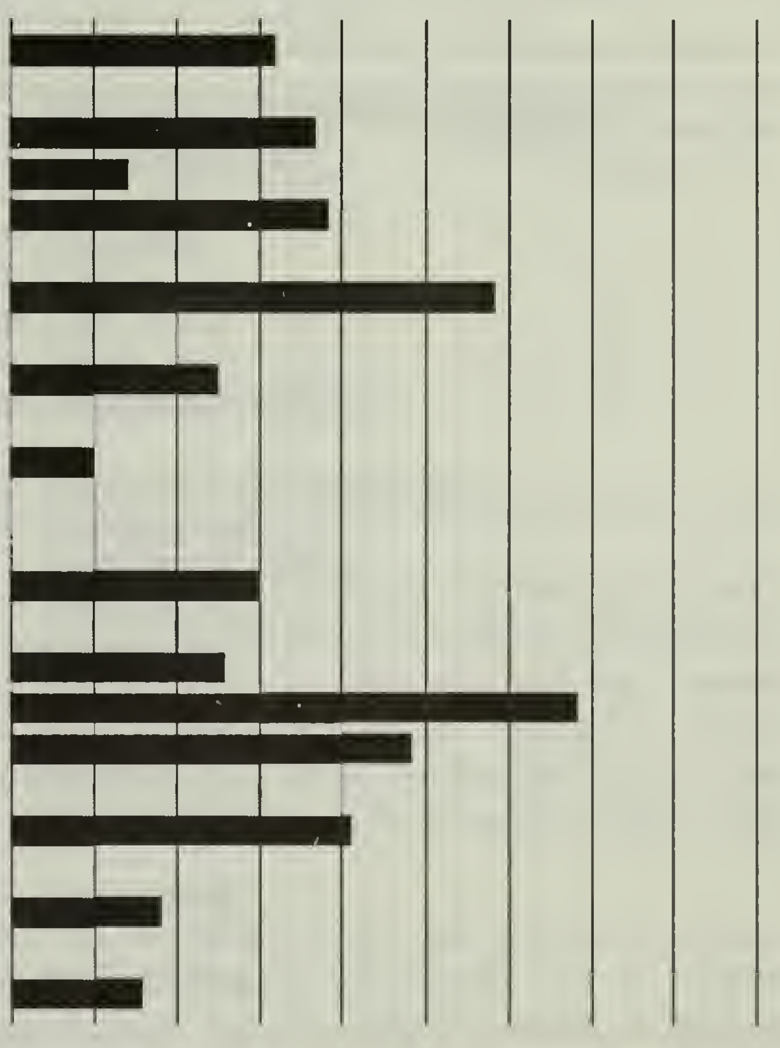
## Grade Four

There is no question that instruction in reading forms the principal focus of the fourth grade curriculum. Approximately 75 percent of teachers spend more than four hours a week in reading instruction, with more than half of all teachers spending more than five hours.. Teachers also spend a great deal of time on mathematics instruction. Approximately half of the teachers spend more than four hours. Although social studies is not given the prominent place of these other two subjects, a considerable amount of time is devoted to instruction. The majority of teachers report spending between two and three hours a week, while another quarter spend over three hours.

In contrast to reading and mathematics, however, there is not a strong consensus about what should be taught in the social studies. When asked to report on the relative coverage of the topics in grades 1 through 4, there was a broad range of responses among teachers. The figure below illustrates the responses given by fourth grade teachers when asked the degree to which they emphasized different social studies topics.

PERCENTAGE OF FOURTH GRADE TEACHERS REPORTING CONSIDERABLE EMPHASIS ON SOCIAL STUDIES TOPICS IN GRADES 1 TO 4

| | |
|---|---|
| • specifics of history (e.g., people, events) | 31 |
| • sense of history (i.e., how things have changed and influence of past on present) | 37 |
| • government (e.g., principles of, how it works) | 14 |
| • citizenship (e.g., rights and responsibilities) | 39 |
| • physical geography (e.g., place geography, geographic features) | 59 |
| • human geography (e.g., population density, interrelationship of humans and environment) | 25 |
| • basic economic concepts (e.g., buying and selling, goods and services, costs, profits, pricing) | 10 |
| • social environment - social institutions (e.g., family, school), social organization (e.g., communities and other groups), social change | 30 |
| • multicultural environment (e.g., cultural similarities, differences, transmissions, interaction) | 26 |
| • map skills | 69 |
| • reading/interpreting graphic information | 49 |
| • research skills (e.g., types of sources, appropriate information for solving problems, referencing skills) | 41 |
| • analyzing information - types of information (facts, assumptions), relationships among ideas | 19 |
| • evaluating social studies information - weighing evidence, drawing inferences | 16 |



The majority of teachers responded that they place "some emphasis" on all the topics, with some exceptions. Fewer cover basic economic concepts; most place a great deal of emphasis on physical geography and graphical material. In fact, almost all fourth grade teachers report that they have globes, maps, and charts for their children to use, and 61 percent respond that they use primary source material, such as artifacts, objects, manipulative devices and graphics.

The lack of consensus in terms of curriculum at this level is also supported by teachers' responses to ten specific test items that were chosen to represent different content categories. Teachers were asked whether they taught or reviewed the ideas necessary to answer the item correctly. Although teachers' expectations were confirmed in approximately half the cases, the other half showed large discrepancies between instruction and response.

| Percent of Students Grade 4 | Why is it important to have at least two people run for office in an election? |
|---|---|
| 12 | A. so elections can be honest |
| 72 | *B. so people can have a choice |
| 8 | C. so more people can hold office |
| 8 | D. so the election will cost less money |

42% of teachers taught or reviewed

| Percent of Students Grade 4 | Toys might cost less after Christmas because |
|---|---|
| 17 | A. more people want to buy them. |
| 74 | *B. fewer people want to buy them. |
| 5 | C. they cost more to make in the winter. |
| 4 | D. store owners do not have sales in the summer. |

33% of teachers taught or reviewed

| Percent of Students Grade 4 | The best way to earn money helping your neighbor is to offer to do something that your neighbor |
|---|---|
| 17 | A. enjoys doing. |
| 6 | B. cannot do without special tools. |
| 74 | *C. does not have time to do. |
| 2 | D. likes to do alone. |

43% of teachers taught or reviewed

Despite the fact that many teachers had not taught the material necessary to answer the above questions, many students appeared to understand the ideas involved. This supports previous findings in the science assessment that students come to school with a general knowledge which they are able to apply in specific situations. Although the last two questions pertained to their own world, it is significant that so many showed an understanding of the rationale of our elective system, although this had not been addressed in their social studies instruction.

In the following two items, students did less well in areas that form a focal point for social studies curriculum in the elementary grades: community and sense of past. Students' ability to apply their knowledge in these situations is far less successful.

| **Percent of Students Grade 4** | The work adults do at their jobs helps |
|---|---|
| 40 | A. their families. |
| 8 | B. their businesses. |
| 6 | C. their communities. |
| 46 | *D. all of the above. |

72% of teachers taught or reviewed

| **Percent of Students Grade 4** | [passage provided]<br>Which activity is the BEST clue that this story took place in the past? |
|---|---|
| 24 | A. going to school |
| 5 | B. baking bread |
| 56 | *C. cooking meals over a fireplace |
| 15 | D. sewing a patchwork quilt |

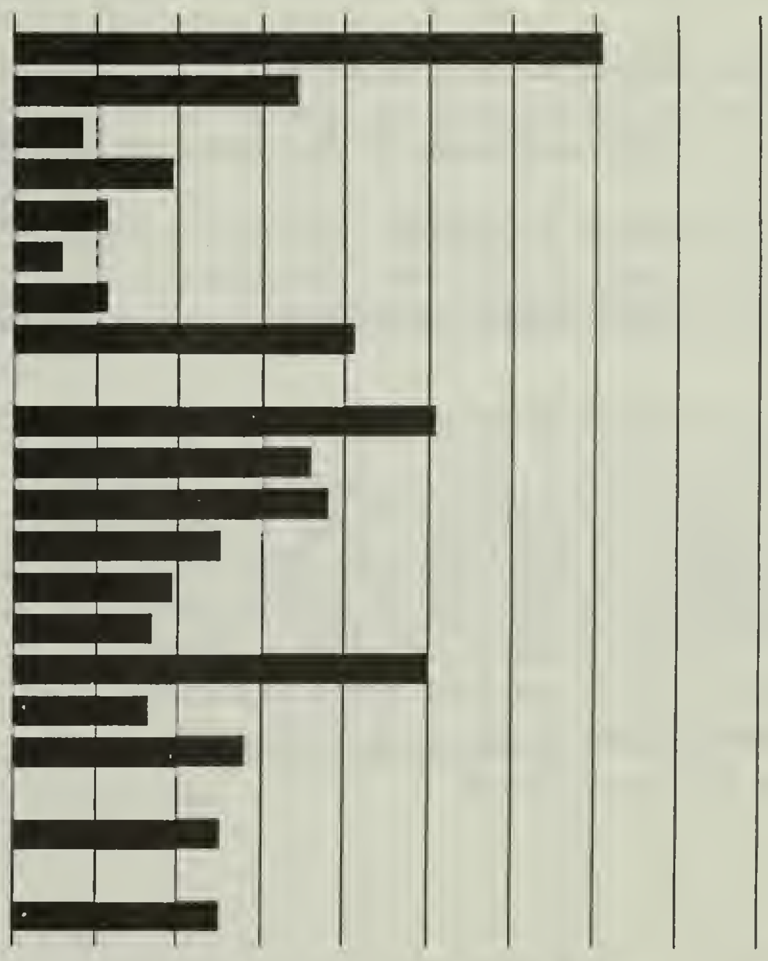
79% of teachers taught or reviewed

## The Curriculum: Grade 8

Similar questions concerning curriculum coverage were asked of teachers in grade 8. Over three quarters of the eighth grade social studies teachers who responded to the questionnaire were teaching American history, however, they were asked to respond to the curriculum coverage questions with reference to grades 5 through 8.

### PERCENTAGE OF EIGHTH GRADE TEACHERS REPORTING CONSIDERABLE EMPHASIS ON SOCIAL STUDIES TOPICS IN GRADES 5 TO 8

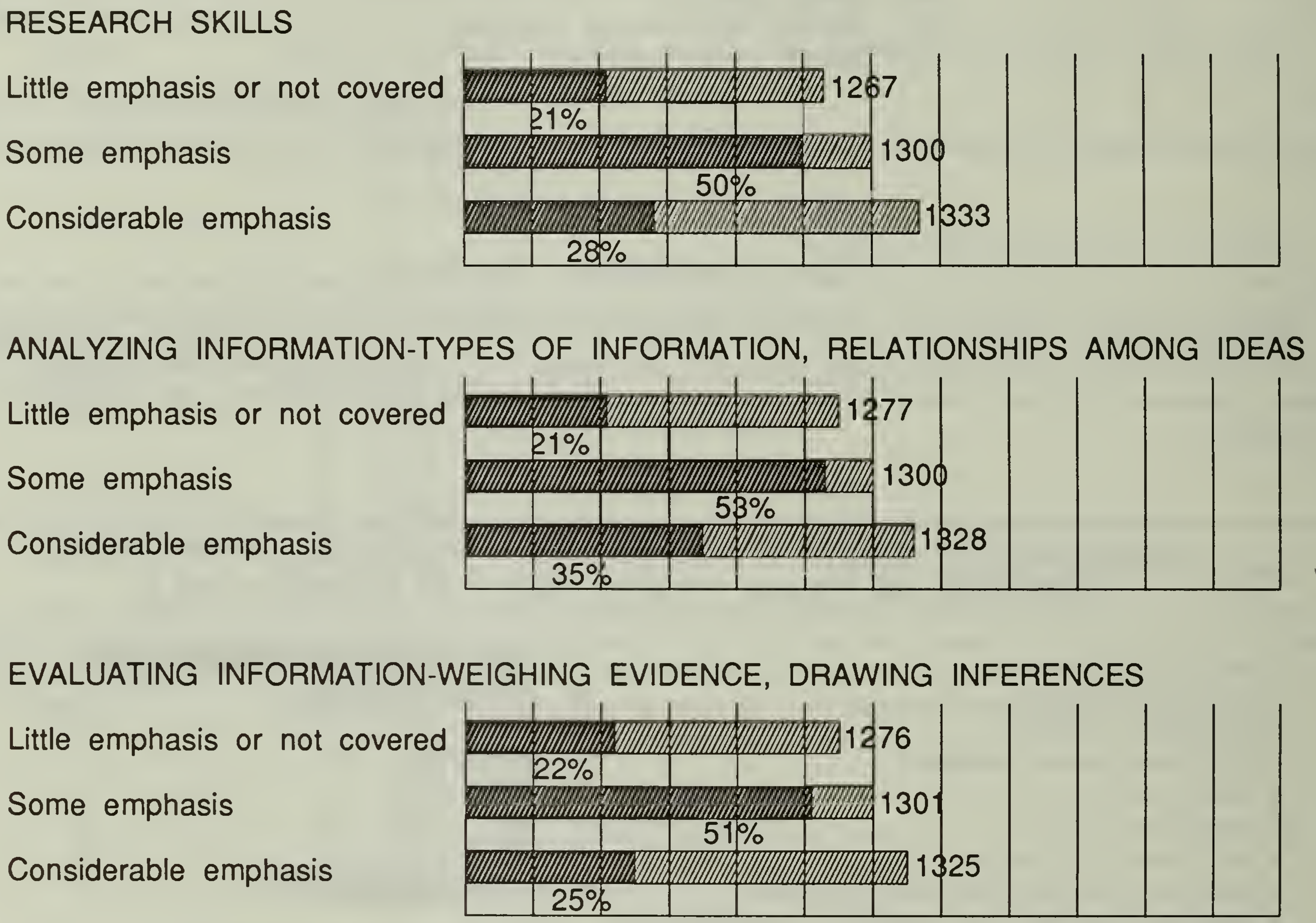
| | |
|---|---|
| • pre-1865 U.S. history | 71 |
| • post-1865 U.S. history | 34 |
| • post-1974 U.S. history | 8 |
| • world history-classical civilizations | 19 |
| • Middle Ages | 11 |
| • Renaissance to 1900 | 6 |
| • 20th Century world history | 11 |
| • government (principles, components, processes) | 41 |
| • government documents (e.g., Declaration of Independence, Constitution) | 51 |
| • citizenship (e.g., rights and responsibilities) | 36 |
| • physical geography | 38 |
| • human geography | 25 |
| • social environment | 19 |
| • multicultural environment | 17 |
| • map skills | 50 |
| • graphic representation | 16 |
| • research skills | 28 |
| • analyzing information - types of information (facts, assumptions), relationships among ideas | 25 |
| • evaluating information - weighing evidence, drawing inferences | 25 |



The most emphasis is given to U.S. history, citizenship and government in content areas. History, other than U.S. history, is generally not covered. Physical geography and map and research skills are emphasized, as are the critical thinking skills of analyzing and evaluating information. A third of teachers replied that they gave little or no emhasis to human geography, social or multicultural environment or graphic representation.

There was little relationship between the amount of emphasis devoted to different content areas and performance; however, schools that stressed research and thinking skills did perform better than others, as the tables below indicate.

**RELATIONSHIP BETWEEN RELATIVE EMPHASIS ON TOPIC AREAS AND PERFORMANCE IN GRADE 8**



As in the case of the fourth grade, teachers were asked to respond to a set of test items. With the exception of pre-1865 U.S. history, which was not addressed in the sample questions, teachers' reports of student preparation to answer questions mirrored their responses to topic coverage in the intermediate level social studies curriculum. However, in matching eighth graders' actual performance on the sample items to their teachers' responses to the same items, some important discrepancies became evident. These discrepancies were most outstanding in the areas of U.S. government and citizenship, as evidenced by the following items.

| Percent of Students Grade 8 | The purpose of writing the Constitution of the United States was to |
|---|---|
| 47 | A. establish the independence of the United States. |
| 4 | B. record the history of the republic. |
| 44 | *C. define a system of government. |
| 5 | D. explain the value of democracy. |

88% of teachers taught or reviewed

| Percent of Students Grade 8 | Which of the following best explains the meaning of "democracy"? |
|---|---|
| 21 | A. Powers are divided between the state and federal governments. |
| 25 | B. The government consists of executive, judicial, and legislative branches. |
| 45 | *C. Citizens participate either directly or indirectly in the governing process. |
| 8 | D. The government controls business and industry. |

90% of teachers taught or reviewed

| Percent of Students Grade 8 | Which of the following powers belongs to the individual states, rather than to federal government? |
|---|---|
| 29 | A. regulation of interstate commerce |
| 8 | B. coining money |
| 49 | *C. control of public education |
| 14 | D. establishment of post offices |

78% of teachers taught or reviewed

Although the last item deals with knowledge, the first two depend upon the understanding of a broader concept. As was noted in the previous section, students appear to be lacking the conceptual framework that gives meaning to the specific facts which they are taught.

Another area in which almost 80 percent of teachers said that they place "some" or "considerable" emphasis was research skills. However, when asked to identify the appropriate source for locating a recent article, only 32 percent chose *The Reader's Guide to Periodical Literature*. Half the students believed that *Time Magazine* would be preferable.

On the other hand, students did show a knowledge beyond that which had been explicitly taught in the social studies curriculum. They showed a knowledge of general economics, values of other cultures, the effect of technology on society, and the purpose of law as it pertains to their own freedom. They also showed a knowledge of historical facts beyond those taught in school. For example, only 26 percent of their teachers replied that the following material had been covered in their curriculum, and yet 42 percent of the students chose the correct response.

A major cause of World War I in Europe was

A. the sinking of the Lusitania.
B. communist aggression.
*C. the rise of nationalism in Europe.
D. high unemployment in Germany.

## Instructional Activities: Grades 8 and 12

Students in the large majority of schools spend most of their social studies classes taking notes from lectures, reading material from their textbooks and discussing and analyzing material that they have read. This is true at both grade levels, although twelfth grade teachers tend to place more emphasis on lecturing while at the eighth grade level there is relatively more emphasis on the reading of textbooks. Approximately half the eighth grade teachers respond that they use material from their textbooks on a daily basis, both in school and for homework. In contrast, approximately a quarter of those teachers stated that more than 25 percent of their students have difficulty reading their current social studies textbook.

The use of maps and globes continues to be a significant part of the eighth grade instruction. Few schools involve their students in role playing, simulation or using the computer. The extent to which students are required to memorize material that they have read is extremely variable, particularly at the high school level. Here, 34 percent of teachers state that they never ask students to memorize, while 31 percent do it on a weekly or daily basis.

In general, a variety of instructional activities led to higher school performance. For example, daily reading from a single text appeared to be a less successful predictor of achievement than daily reading of a variety of materials. Teachers from high-performing schools responded that they used a computer occasionally (20 percent), showed films or videos on a weekly basis (14 percent), engaged their students in role playing once or twice a month (20 percent) and had their students work in small groups approximately once or twice a week (17 percent). Teachers from poorly-performing schools generally did not include these or other activities in their repertoire.

At grade 12 level students reported less reading of material from textbooks and slightly more reading of other material. The writing of short answers to questions and the use of maps and globes are less emphasized. There tends to be more discussion of current events than is typical of the eighth grade.

At both levels, better students are called upon to discuss and analyze the material more frequently than others, to write short answers to questions and to discuss current events. Twelfth grade students are also more likely to be required to complete a research/term paper. More stress is put on memorization for the less able student. They are also more likely to watch films and videos at least several times a week. Computers are also used more frequently as a learning aid with lower-achieving students.

Eighth grade teachers rely primarily on objective tests and short written responses for their evaluation of students. Although over 40 percent state that they place a great deal of emphasis on class discusion, few give any weight to discussion or term pepers when determining final grades. These are generally based on the results of quizzes. The small number of teachers who placed no emphasis on project work and essays (5 percent and 7 percent, respectively) came from schools that scored significantly lower than others in the assessment. Replies were similar at the high school level, although teachers at this level tended to rely more heavily on essay tests (38 percent versus 24 percent at grade 8).

## Instructional Resources: Grades 8 and 12

The most common source of material for eighth grade teachers is a single textbook or materials that they have developed themselves. However, approximately 20 percent of the teachers responding place a great deal of reliance on multiple texts, current sources of information (e.g., newspapers, magazines), and library resources. Slightly more teachers rely heavily on current and primary sources of information at the high school level. At both levels, teachers' use of multiple texts and library resources were related to their school's performance. This relationship confirms the general relationship between material resources and school performance that has been found in other subject areas and grade levels.

## Homework: Grades 8 and 12

Teachers' and students' answers to questions concerning homework differed markedly. While the majority of eighth grade students (58 percent) replied that they spent less than an hour each week on social studies homework, almost half of their teachers expect students to spend between one and two hours a week completing homework. Another third expect students to spend from two to four hours. Although homework policy is related to school performance, the largest difference in performance was accounted for by the extremes (i.e., no homework versus between two and four hours). On the other hand, individual student performance is highly related to the time spent on homework.

At the high school level, a third of the teachers expect between one and two hours on homework, 43 percent between two and four hours. As in the case of the eighth grade, this grossly overestimates the amount of time that students report actually spending on their social studies homework. Sixty percent of students replied that they spend less than an hour, while 23 percent spend between one and two hours a week. The relationship between time spent on homework and school performance is stronger than at grade 8, as is the relationship between the time reported by individual students and their scores on the social studies assessment questions.

Eighth grade students are most frequently required to read from their textbooks and to write short answers to text questions. Although the type of homework assignment is not strongly related to school performance, teachers who reported that they never gave such assignments as writing a two page report or working on a project or investgation (8 percent of teachers) came from schools with significantly lower performance scores.

At the high school level the most common type of homework assignment was, again, reading from the textbook. Fifty-two percent of the teachers replied that they gave this type of assignment almost daily. A slightly larger percentage of high school teachers reported never assigning projects or papers to their students and, as in the case of grade 8, these teachers came from schools that performed significantly lower on the social studies assessment. In contrast, slightly more than half the students expected to have written a research or term paper by the end of the semester.

## Student Attitudes: Grades 8 and 12

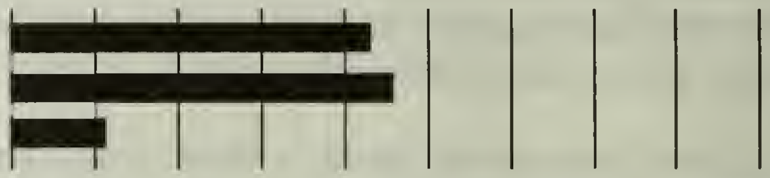
At the eighth grade level, approximately one third of the students replied that they looked forward to their social studies class "most of the time"; the same percentage replied "hardly ever." These attitudes reflect a significant difference in students' achievement of 75 points. At the twelfth grade, the percentage of students with a positive attitude increased slightly, as did the differential in scores between students who enjoyed and who did not enjoy social studies. By twelfth grade this difference in achievement had doubled.

On the other hand, despite the fact that social studies is seen as less difficult than science and mathematics, approximately 60 percent of students at both levels believe that it is "mainly memorizing." This represents 15 percent more students than those who believed this to be true in regard to science or mathematics, where it is related to type of course. In social studies this attitude prevailed at all student ability levels. Fewer students also believed that social studies is very useful in understanding the world or in getting along in everyday life.

At the twelfth grade level, students were asked about their ability to influence government, with the following results.

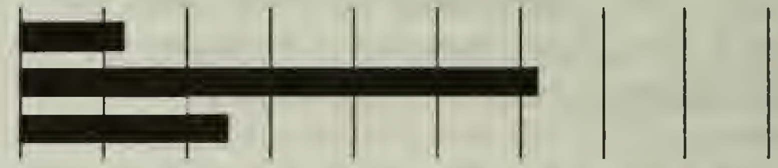
**How much do you feel that having elections makes the government pay attention to what the people think?**

| | |
|---|---|
| a good deal | 43% |
| some | 46% |
| not much | 11% |



**Over the years, how much attention do you feel the government pays to people's opinions when it decides what to do?**

| | |
|---|---|
| a good deal | 12% |
| some | 62% |
| not much | 25% |

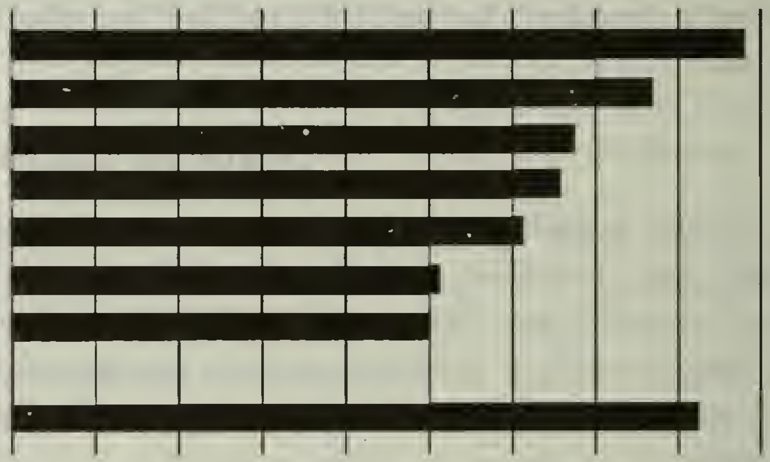


## Course Offerings: Grade 12

When high school principals were asked about the variety of courses offerred in their schools, the following results were obtained.

PERCENTAGE OF MASSACHUSETTS SCHOOLS OFFERING SOCIAL STUDIES COURSE

| COURSE | % |
|---|---|
| World civilization/history | 88% |
| Psychology | 77% |
| Current issues | 68% |
| Economics | 66% |
| Sociology/anthropology | 61% |
| Geography | 51% |
| Political science | 50% |
| Others not listed | 83% |



School performance on the social studies assessment was most highly associated with course offerings in sociology/anthropology, psychology and world civilization/history. In other words, schools that did not offer these courses performed significantly below those that did. Students in schools that did offer such courses performed at or about the mean.

Forty-three percent of schools offer advanced placement courses in American history and 13 percent in American government and politics. Thirty percent of schools plan to increase their course offerings in social studies within the next two years.

The majority of schools (73 percent) require one year of U.S. history for graduation, while a further 14 percent require two or more years. Thirty-seven percent of schools require at least one year of course work in U.S. government or civics, while 44 percent require at least one year of study in other history/social studies areas.

## Course-Taking: Grade 12 Students

Approximately 40 percent of students are no longer taking a course in social studies at grade 12. The majority of the others (26 percent) are taking psychology, sociology, anthropology, or economics. Thirteen percent are studying government or political science and 11 percent are studying world history or civilization.

**Since ninth grade, to what extent have you studied the following subjects?**

| | none | touched on in some courses | 1 semester devoted | 2 semesters or more devoted |
|---|---|---|---|---|
| government/civics/political science ........ | 15 | 23 | 23 | 39 |
| American history .................................... | 2 | 5 | 15 | 77 |
| geography ............................................ | 32 | 40 | 13 | 13 |
| psychology, sociology, anthropology .... | 40 | 13 | 20 | 26 |
| economics ............................................ | 50 | 22 | 14 | 12 |

The majority of tewlfth grade students (41 percent) stated that they had taken and passed 2 years of social studies. Another 35 percent had taken more than that.

## Course-Taking and Achievement

The extent to which students had studied a subject was examined in relation to the set of items that measured achievement in that subcategory on the test. Although students who stated that they had not studied geography to any extent performed poorly on almost all of the geography items, the extent to which geography was formally studied did not appear to affect performance. In fact, especially in the category of human geography, the highest scores were achieved by students who had stated that human geography was "touched on in some courses." This suggests the essential role that geography plays in political history and it can be assumed that students learned many of their geographic concepts from other courses.

The situation was somewhat different in regard to economics. When students were asked questions that dealt with specific economic terms and concepts (the meaning of "opportunity cost," the essential features of capitalism, the concept of scarcity), students who had formally studied economics for one or more semesters were clearly superior than those who had not. However, as was the case in the earlier grades, it is clear that all students have some practical knowledge of economics. In that realm, their reasoning is not improved by studying economics as it is currently taught.

Jane went to the store with her mother. Her mother said, "Eggs cost more today than they did last month."

Which one of the following sentences gives a good reason why the eggs cost more today than they did last month?

A. The chickens are laying more eggs.
*B. The store owner is paying his workers more money.
C. There are more eggs in the store than people can buy.
D. People are not buying as many eggs as they used to buy.
E. I don't know.

| course of study | none | touched on in some courses | 1 semester devoted | 2 semesters or more devoted |
|---|---|---|---|---|
| economics ............................................ | 45% | 49% | 52% | 52% |

Commercial advertising in the United States affects individual behavior and attitudes by

A. emphasizing personal freedom.
*B. creating wants and needs.
C. providing unbiased information.
D. eliminating stereotypes.

| course of study | none | touched on in some courses | 1 semester devoted | 2 semesters or more devoted |
|---|---|---|---|---|
| economics | 76% | 80% | 77% | 80% |

# CHAPTER 4: SUMMARY AND CONCLUSIONS

The assessment reveals a high level of achievement on the part of fourth grade students. They demonstrated a strong knowledge of specific historical facts, especially those commonly addressed in the primary level curriculum. They showed a good knowledge of basic government concepts and were able to apply civic concepts to their own lives. They showed considerable knowledge of other cultures. They were able to read graphical information and were familiar with a variety of reference materials. More surprisingly, they showed a familiarity with many economic terms and concepts, particularly as they applied to their own lives (such as Christmas sales). In general, they were able to use their knowledge to reason well in the test questions.

On the other hand, given the importance placed on "sense of the past" by approximately 60 percent of fourth grade teachers, students appeared to lack a sense of chronology. They found it difficult to place events in sequence or to reason from their obvious knowledge of historical events. In other words, their knowledge was not "anchored."

This lack of "anchoring," relating to both chronology and underlying political and historical concepts, was particularly apparent at the later grade levels. There is no question that students know many historical facts. On the other hand, students were not only unable to relate historical events to one another, but they seemed to lack the basic conceptual understanding that would make sense of history. There are numerous instances in which students failed to understand the basic principles or reasons for historical events. In all topic areas, at all levels, students performed well when the subject was specific and related to their own lives. However, when asked to relate concepts, as those found in government or civics, to historical or current events, they were unable to do so.

In addition, older students appear to lack a working vocabulary for the social studies disciplines, as well as knowledge of research techniques and sources. They had difficulty in identifying and using a variety of reference materials. Even when growth between grades was present, neither grade level performed well in this area.

Finally, there appears to be a lack of growth in analysis and evaluation skills throughout the grades. Although the ability of fourth grade students to reason and analyze was considered good, older students performed poorly in questions involving both evaluation and analysis. They were unable to recognize words that connote bias or emotional symbols that trigger a response. They were unable to recognize assumptions, particularly when these assumptions might have been their own, and found it difficult to analyze evidence.

In general, the social studies committee found junior high school results disappointing and suggested that they may reflect the great variety of instructional focus at this level. When asked about curricular emphasis in grades 5-8, with the exception of pre-Civil War history, most teachers gave "some" or "little" emphasis to most topics. Across school systems, there was little consensus on what should form the curriculum content for these grades.

The committee recommended more emphasis at the elementary and junior high levels on making history more concrete. Referring to the good performance in economics, they suggest that students better understand concepts when they are translated into everyday realities. At the older grade levels, students need dates or major events as benchmarks for a sense of history. However, dates in themselves can be just a string of digits unless they are translated into situations that students can understand and relate to.

In reviewing the findings, the committe stressed the important role that reading ability plays in the social studies curriculum. It is obvious from the questionnaire responses that textbooks are the primary source for instruction and the primary medium for homework at the eighth and twelfth grade levels. On the other hand, approximately a quarter of the teachers surveyed stated that over 25 percent of their students experienced difficulty in understanding their textbook. On reviewing responses to individual questions, the committee believed that vocabulary was often the reason underlying incorrect responses. It suggested that more emphasis should be placed on the reading process in the content areas, on the part of both reading and social studies teachers. In addition, the committee suggested that, in order to make time less abstract for children, elementary school teachers need to link what children read to the historical context in which the action takes place. All of social studies instruction need not take place within the formal social studies curriculum.

The committee also reacted strongly to the very poor results in research skills at the older grades. They suggest that "doing one project a semester is not enough. Research skills need constant practice." That students are not getting practice is evident from responses to the student questionnaires. Asked whether they had written a report of three pages or more during the last four weeks, over 70 percent of students replied that they had not. Slightly more than half of the twelfth grade students expected to have written a research or term paper by the end of the semester.

From the analysis of the questionnaire data, it was apparent that the more that teachers use a variety of media to present materials, the more they encourage students to discuss and analyze, the more students use library resources and the more they write, the better their performance on the social studies assessment. And yet, perhaps the most striking outcome of the social studies assessment is the information regarding students' perceptions of the subject itself. What should be an area of great interest, affecting all aspects of their lives, is seen by most students as mainly a task in memorizing.

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Other publications concerning the Massachusetts Educational Assessment Program:

- *Description of Test Content and Reporting Categories*
- *1988 Statewide Summary*
- *Using the School Report*

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